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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,880	06/16/2005	Simone Eisele	VAL 205 P2	6369
34232 7590 06/26/2007 MATTHEW R. JENKINS, ESQ. 2310 FAR HILLS BUILDING DAYTON, OH 45419				
			EXAMINER HOGAN, JAMES SEAN	
			ART UNIT 3752	PAPER NUMBER
			MAIL DATE 06/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,880

Applicant(s)

EISELE ET AL.

Examiner

James S. Hogan

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-13, 21, 23, 25, 26, 28-30, 35 and 36 is/are rejected.
- 7) ☒ Claim(s) 8-10, 14-20, 22, 24, 27 and 31-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/16.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim 33 is objected to because of the following informalities: Claim 33 depends from itself. The Examiner will approach the prosecution of this claim but assuming it was supposed to depend from claim 32. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 recites the limitation "the other channel section and "the third axis" " in 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the other channel section" and "the third axis" " in 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 25-26, and 28, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,705,538 to Fecht et al.

As per claims 1 and 25, Fecht et al disclose a nozzle exposing the basic geometry to be capable for use on a vehicle having a nozzle channel (5) in a nozzle body, at least one nozzle opening (10), a supply line (4), and a collision supply line (3) meeting in a mixing chamber (2) upstream of a nozzle opening (10). As per claim 2 and 25, a region (5) is provided upstream of the collision chamber for the main jet. As per claims 3 and 26, the region (5) upstream of the mixing chamber narrows as it approaches the mixing chamber. As per claim 28, the nozzle opening disclosed by Fecht et al generates a fan shaped nozzle jet.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13, 29-30 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,705,538 to Fecht et al.

The rejection of claims 1 and 25 above serve as the basis for the following. As per claim 11 and 29, Fecht et al does not teach the second collision line being supplied by the same medium as the primary line. However, given the basic nozzle geometry as taught by Fecht et al it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the nozzle of Fecht et al by supplying the same medium to both inlet lines for the purpose of spraying a single medium. As per claims 12 and 30, the collision line meets at a perpendicular direction to the primary

line. As per claim 13, the perpendicular opening to the collision line is along the longer side of the nozzle opening. As per claims 25 and 36, Fecht et al does not teach a valve coupled to the nozzle body controlling the influx of either fluid input, with the valve causing fluid to flow into the inputs when a vehicle is at a predetermined speed, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have employed a valving arrangement technology well known in the art of spraying for a vehicle with the nozzle arrangement of Fecht et al in order to create a spraying system for a vehicle.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,705,538 to Fecht et al in view of U.S. Patent No. 6,497,375 to Srinath et al.

The rejection of claims 1 and 25 above serve as the basis for the following. As per claims 5 and 6, Fecht et al does not teach a nozzle channel formed on a nozzle insert. Srinath et al teaches a nozzle insert perfectly capable of being included in the nozzle of Fecht et al having at least one channel groove (CP1, CP2) forming a narrowed channel section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included the use of the nozzle insert of Srinath et al with the nozzle. As per claim 7, Srinath et al teaches two channels. As per claim 9, the axes of the two channels are arranged in a common plane. As per claim 20, Srinath et al does not teach the two channel sections being a different cross sectional sizes, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have changed the sizes of the channels with

respect to one another since it known in the art to change the size of a component to change the performance of a total apparatus.

Allowable Subject Matter

Claims 8-10,14-20, 22, 24, 27, and 31-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and overcoming any informalities.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

U.S. Patent No. 4,721,251 to Kondo et al.

U.S. Patent No. 5,083,339 to Bristow

U.S. Patent No. 6,338,444 to Swan

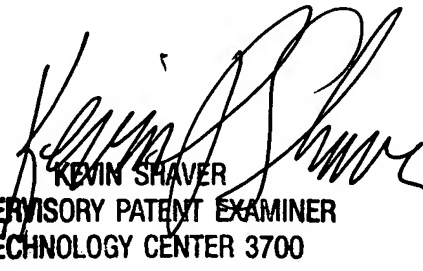
U.S. Patent No. 5,170,942 to Spink et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Hogan whose telephone number is (571) 272-4902. The examiner can normally be reached on Mon-Fri, 7:00a-4:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSH
6/4/2007


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